Title (en)

SIC SEMICONDUCTOR SUBSTRATE, AND, PRODUCTION METHOD THEREFOR AND PRODUCTION DEVICE THEREFOR

Title (de)

SIC-HALBLEITERSUBSTRAT UND HERSTELLUNGSVERFAHREN DAFÜR UND HERSTELLUNGSVORRICHTUNG DAFÜR

Title (fr)

SUBSTRAT SEMI-CONDUCTEUR EN SIC ET PROCÉDÉ DE PRODUCTION S'Y RAPPORTANT ET DISPOSITIF DE PRODUCTION S'Y RAPPORTANT

Publication

**EP 3879010 A4 20220713 (EN)**

Application

**EP 19881264 A 20191105**

Priority

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- JP 2019043204 W 20191105

Abstract (en)

[origin: EP3879010A1] The problem to be addressed by the invention is to provide an SiC semiconductor substrate having a growth layer for which the step height has been controlled, a production method therefor, and a production device therefor. The invention is characterized by containing a growth step for causing an SiC substrate 10 to grow under an SiC-Si equilibrium vapor pressure environment. Causing the SiC substrate 10 to grow under the SiC-Si equilibrium vapor pressure environment in this manner allows the SiC semiconductor substrate for which the growth layer step height has been controlled, to be provided.

IPC 8 full level

**C30B 29/36** (2006.01); **C30B 23/02** (2006.01); **C30B 25/20** (2006.01); **H01L 21/02** (2006.01)

CPC (source: EP US)

**C30B 23/02** (2013.01 - EP); **C30B 25/20** (2013.01 - EP); **C30B 29/36** (2013.01 - EP US); **H01L 21/02263** (2013.01 - US); **H01L 21/02378** (2013.01 - EP US); **H01L 21/02433** (2013.01 - EP); **H01L 21/02529** (2013.01 - EP US); **H01L 21/02631** (2013.01 - EP); **H01L 29/1608** (2013.01 - US)

Citation (search report)

- [X] US 2006144324 A1 20060706 - SAKAGUCHI YASUYUKI [JP], et al
- [X] WO 2017188381 A1 20171102 - KWANSEI GAKUIN EDUCATIONAL FOUND [JP]
- [X] WO 2017188382 A1 20171102 - KWANSEI GAKUIN EDUCATIONAL FOUND [JP]
- See also references of WO 2020095873A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3879010 A1 20210915**; **EP 3879010 A4 20220713**; CN 113227466 A 20210806; JP 7464806 B2 20240410; JP WO2020095873 A1 20211007; TW 202035807 A 20201001; US 2021399095 A1 20211223; WO 2020095873 A1 20200514

DOCDB simple family (application)

**EP 19881264 A 20191105**; CN 201980072707 A 20191105; JP 2019043204 W 20191105; JP 2020556060 A 20191105; TW 108140074 A 20191105; US 201917291572 A 20191105